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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,611	06/21/2001	Mark W. Sylor	00124-025001	4361

			EXAMINER
7590	10/25/2006		SHINGLES, KRISTIE D

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ART UNIT	PAPER NUMBER
2141	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/886,611	SYLOR ET AL.
	Examiner	Art Unit	
	Kristie Shingles	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _09 August 2006_.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-14, 16 and 17_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-14, 16 and 17_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments
Claims 1, 13, 16 and 17 were amended.
Claims 15 and 18 have been canceled.

Claims 1-14, 16 and 17 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1, 13, 16 and 17 have been considered but are moot

in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   **Claims 1, 13, 16 and 17** are rejected under 35 U.S.C. 102(e) as being anticipated by
Quarterman et al (US 2002/0177910).

a.   **Per claims 1 and 16** (differs only by statutory class), *Quarterman et al* teach a

method of monitoring an element in a computer network, said method comprising:

- monitoring a preselected variable relating to said element (page 12 paragraphs 0157-0158—event monitoring);

- defining a threshold for the monitored preselected variable (page 13 paragraphs 0160-0163, 0165—monitored events with defined thresholds);

- establishing a sliding window in time (page 13 paragraphs 0161 and 0165—provision for sliding time windows and sliding window averaging);

- repeatedly generating a time above threshold value, said time above threshold value being a measure of an amount of time during which the monitored variable exceeded the threshold during the sliding window of time, wherein the measure of the amount of time during which the monitored variable exceeded the threshold during the sliding window in time includes an aggregation of two or more noncontiguous time intervals during which the monitored variable exceeded the threshold during the sliding window in time (page 13 paragraphs 0163, 0167 and 0171-0172; page 14 paragraphs 0173-0176—generating a time above threshold value during the sliding window which includes an aggregation of time intervals during the sliding window when the threshold was exceeded);

- detecting when the time above threshold value exceeds a predefined condition window value (page 12 paragraphs 0129-0153; page 13 paragraphs 0160, 0163-0167—detection when time above threshold exceed a specific time interval); and

- in response to detecting when the time above threshold value exceeds said condition window, generating an alarm (page 12 paragraphs 0152-0154; page 13 paragraphs 0160 and 0171—event flags are triggered and generated when the threshold has been exceeded).

    b.   **Per claims 13 and 17** (differs only by statutory class), *Quarterman et al* teach a

method of monitoring an element in a computer network, said method comprising:

- defining a profile for that element, said profile including a plurality of different alarm rules, each of said different alarm rules establishing an alarm test for a corresponding one or more variables (page 13 paragraphs 0160-0163, 0165—monitored events with defined thresholds);

- detecting when the alarm test for any one or more of the plurality of different alarm rules is met (page 12 paragraphs 0152-0154; page 13 paragraphs 0160 and 0171—event flags are triggered when a defined threshold rule has been exceeded);

- repeatedly generating a time above threshold value, said time above threshold value being a measure of an amount of time during which at least one of the one or more alarm tests has been met during a preselected prior window of time,

wherein the measure of the amount of time during which at least one of the one or more alarm tests has been met during the preselected prior window in time includes an aggregation of two or more noncontiguous time intervals during which at least one of the one or more alarm tests has been met during a preselected prior window in time (page 13 paragraphs 0163, 0167 and 0171-0172; page 14 paragraphs 0173-0176—generating a time above threshold value during the preselcted prior window in time which includes an aggregation of time intervals during the preselcted prior window when the threshold was exceeded)

- detecting when the time above threshold value exceeds a predefined condition window value (page 12 paragraphs 0129-0153; page 13 paragraphs 0160, 0163-0167—detection when time above threshold exceed a specific time interval); and

- in response to detecting when the time above threshold value exceeds said condition window, generating an alarm (page 12 paragraphs 0152-0154; page 13 paragraphs 0160 and 0171—event flags are triggered and generated when the threshold has been exceeded).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 2-4 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Quarterman et al* (US 2002/0177910) in view of *Northcott* (USPN 6,098,195).

a.   **Per claim 2,** *Quarterman et al* teach the method of claim 1 as applied above. Althougth *Quarterman et al* teach maintaining an event trigger until a reset threshold signals the end of the event (page 13 paragraph 0167), *Quarterman et al* fail to explicitly teach the method of claim 1 further comprising after generating an alarm, maintaining the alarm at least as long as the time above threshold value exceeds a clear window value. However, *Northcott* teaches

generating an alarm condition when the counters exceed the threshold limit and maintaining the

alarm as long as the counters are above the threshold level (col.3 lines 21-30). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to combine the

teachings of *Quarterman et al* with *Northcott* for the purpose of asserting an alarm upon the

detection of a specific event or condition and continuing in the alarm state; because it would

provide an indication declaring the status of the system's operating functions—whether the

exception/fault initiating the alarm has been remedied or whether the condition is still occurring.

   b.   **Claim 14** is substantially equivalent to claim 2, and is therefore rejected under the

same basis.

   c.   **Per claim 3,** *Quarterman et al* with *Northcott* teach the method of claim 2,

Northcott further teaches the method of claim 2 wherein said clear window value is equal to said

condition window value (Col.3 Lines 13-25; the time above threshold exceeds a clear window

value, T time periods, which is also the condition window value that when exceeded, generates

the alarm).

   d.   **Per claim 4,** *Quarterman et al* with *Northcott* teach the method of claim 3,

Quarterman et al further teach the method further comprising:

- monitoring a plurality of variables relating to said element, said preselected variable being one of said plurality of variables (page 13 paragraphs 0160-0163, 0165—monitored events with defined thresholds); and

- for each of the plurality of monitored variables, defining a corresponding threshold for that other variable, wherein the time above threshold value is a measure of an amount of time during which any one or more of the monitored variables exceeded its corresponding threshold during the corresponding sliding window of time (page 12 paragraphs 0152-0154; page 13 paragraphs 0160 and 0171—event flags are triggered when a defined threshold rule has been exceeded).

5.   **Claims 5-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Quarterman et al* (US 2002/0177910) in view of *Chandra et al* (USPN 6,397,359).

a.   **Per claim 5,** *Quarterman et al* teach the method of claim 1 as applied above. *Quarterman et al* teach computing a sliding average for the sliding window and the prior sliding window (page 13 paragraphs 0165, 0171-0172; page 14 paragraphs 0173-0177), yet fail to distinctly teach the method of claim 1 wherein the step of defining the threshold for the preselected variable comprises: defining an excursion amount; and setting the threshold equal to a sum of the average value plus the excursion amount. However, *Chandra et al* teach implementing an auto-threshold computation, with an excursion amount equal to the product of the Stdev_count and Critical_stdev (or Stdev); wherein the auto-threshold value is equal to the sum of the mean plus the excursion amount (col.24 lines 58-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Quarterman et al* with *Chandra et al* for the purpose of enhancing threshold criteria to rely on an additional values instead of just one amount; because it would aid in establishing a more intricate monitoring system thereby reducing false alarms. It would also allow for the use of more precise condition indicators capable of differentiating and expanding alarm states that are based on additional values.

b.   **Per claim 6,** *Quarterman al* with *Chandra et al* teach the method of claim 5, *Chandra et al* further teach the method wherein the corresponding period of time is less than a day (col.3 lines 24-32, col.8 lines 14-26, col.13 lines 19-25 and col.14 lines 3-29; the time period for active or passive performance testing may be periodic or variable based on the schedule and the user's preference; *Quarterman et al*: page 13 paragraphs 0162-0165).

c.   **Claim 7** is substantially similar to claim 6 and is therefore rejected under the same basis.

d.   **Per claim 8,** *Chandra et al* teach the method of claim 6 wherein the step of computing the average comprises computing a mean value for the preselected variable using values obtained for that preselected variable for the same hour period of the same day of the week for a predetermined number of previous weeks (col.24 lines 29-57; *Quarterman et al*: page 13 paragraph 0162-0165, pages 13-14 paragraphs 0171-0176).

e.   **Per claim 9,** *Chandra et al* teach the method of claim 5 wherein the step of defining an excursion amount comprises: computing a standard deviation for the preselected variable based on values obtained for the preselected variable over a predetermined period of time; and setting the excursion amount equal to K times the computed standard deviation, wherein K is a positive number (col.24 line 61-col.25 line 8; the standard deviation of the performance results in calculated and can be multiplied by Stdev_count, K, which is a user configurable value comprising positive numbers).

f.   **Per claim 10,** *Chandra et al* teach the method of claim 9 wherein the step of computing the standard deviation comprises computing the standard deviation using values obtained for that preselected variable for the same hour period of the same day of the week for a predetermined number of previous weeks (col.24 lines 34-57; in the auto-threshold computation, the standard deviation can be calculated using the values for the variables on a periodic basis).

g.   **Per claim 11,** *Quarterman et al* teach the method of claim 1 as applied above, yet fail to distinctly teach the method of claim 1 wherein the step of defining the threshold for the preselected variable comprises: defining an excursion amount; and setting the threshold equal to

H less the excursion amount, where H is a positive number. However, *Chandra et al* teach auto-

threshold computations which comprise calculating a standard deviation of the results and it is

well-known that the standard deviation is calculated with a plus-or-minus, +/-, factor; thus in the

minus condition, the threshold would be equal to a value, H, less the excursion amount (col.24

line 58-col.25 line 19). It would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of *Quarterman et al* with *Chandra et al* for the

purpose of enhancing threshold criteria to rely on an additional value instead of just one amount;

because it would aid in establishing a more intricate monitoring system thereby render more

exact measurements by offsetting and weighing the performance results. It would also allow for

the use of more precise threshold indicators capable of differentiating alarm states and

determining performance trends and characteristics bases on the additional values.

h.   **Claim 12** is substantially similar to claim 9 and is therefore rejected under the

same basis.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
Boulton et al (6,744,748), Malmlof (6,594,241), Kalkunte et al (6,747,951), Landan (6,564,342
and 6,449,739), Nelson et al (7,120,676), Mayle et al (6,182,022), Slaight (6,882,963), Bush
(6,754,664).

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner

kds

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER